Buildings & Infrastructure

OT-BU-xxx nodes

- 9.01 — Construction
- 9.02 — Heating & Cooling
- 9.03 — Residential
- 9.04 — Commercial
- 9.05 — Transport Infrastructure
- CT-BU-001 — Green Building Design & Certification
- CT-BU-002 — Building Energy Retrofit
- CT-BU-003 — Affordable Green Housing
- CT-BU-004 — Urban Resilience & Climate Adaptation Infrastructure
- CT-BU-005 — Green Roofs & Urban Greening

9.01 — Construction

origo_id	9.01
origo_label	Construction
sector	BU
source	HolonIQ v2.1
gap_type	
latam_relevant	Y
cpi_aligned	TBD — Phase 1
eu_taxonomy_aligned	TBD — Phase 1
cbi_eligible	TBD — Phase 1
eudr_coffee	N
eudr_cacao	N
eudr_relevant	N
eudr_article9_field	none
eudr_evidence_type	none
col_gf_sector	construction
col_gf_activity	New sustainable building construction
col_gf_aligned	Y
col_ndc2030_aligned	TBD — Phase 2
latam_colombia	Y
cr_gf_aligned	Y
cth_data_coverage	TBD — Phase 4
schema_version	1.0
last_updated	2026-05-26

Description

[To be populated — description of what this taxonomy node covers and its relevance to LATAM climate innovation and EUDR compliance.]

EUDR Compliance Relevance

[To be populated during Phase 3 — how data in this category supports Article 9 due diligence.]

Colombia Context

[To be populated during Phase 4 — Colombia-specific regulatory alignment, CTH field presence, market conditions.]


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{
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  "origo_label": "Construction",
  "sector": "BU",
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  "eudr_relevant": "N",
  "eudr_article9_field": "none",
  "col_gf_sector": "construction",
  "col_gf_aligned": "Y",
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  "cr_gf_aligned": "Y",
  "schema_version": "1.0",
  "last_updated": "2026-05-26"
}
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9.02 — Heating & Cooling

origo_id	9.02
origo_label	Heating & Cooling
sector	BU
source	HolonIQ v2.1
gap_type	
latam_relevant	Y
cpi_aligned	TBD — Phase 1
eu_taxonomy_aligned	TBD — Phase 1
cbi_eligible	TBD — Phase 1
eudr_coffee	N
eudr_cacao	N
eudr_relevant	N
eudr_article9_field	none
eudr_evidence_type	none
col_gf_sector	construction
col_gf_activity	Energy efficiency in buildings
col_gf_aligned	Y
col_ndc2030_aligned	TBD — Phase 2
latam_colombia	Y
cr_gf_aligned	Y
cth_data_coverage	TBD — Phase 4
schema_version	1.0
last_updated	2026-05-26

Description

[To be populated — description of what this taxonomy node covers and its relevance to LATAM climate innovation and EUDR compliance.]

EUDR Compliance Relevance

[To be populated during Phase 3 — how data in this category supports Article 9 due diligence.]

Colombia Context

[To be populated during Phase 4 — Colombia-specific regulatory alignment, CTH field presence, market conditions.]


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  "eudr_coffee": "N",
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  "latam_colombia": "Y",
  "cr_gf_aligned": "Y",
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9.03 — Residential

origo_id	9.03
origo_label	Residential
sector	BU
source	HolonIQ v2.1
gap_type	
latam_relevant	Y
cpi_aligned	TBD — Phase 1
eu_taxonomy_aligned	TBD — Phase 1
cbi_eligible	TBD — Phase 1
eudr_coffee	N
eudr_cacao	N
eudr_relevant	N
eudr_article9_field	none
eudr_evidence_type	none
col_gf_sector	construction
col_gf_activity	Building renovation for energy efficiency
col_gf_aligned	Y
col_ndc2030_aligned	TBD — Phase 2
latam_colombia	Y
cr_gf_aligned	Y
cth_data_coverage	TBD — Phase 4
schema_version	1.0
last_updated	2026-05-26

Description

[To be populated — description of what this taxonomy node covers and its relevance to LATAM climate innovation and EUDR compliance.]

EUDR Compliance Relevance

[To be populated during Phase 3 — how data in this category supports Article 9 due diligence.]

Colombia Context

[To be populated during Phase 4 — Colombia-specific regulatory alignment, CTH field presence, market conditions.]


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  "source": "HolonIQ v2.1",
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9.04 — Commercial

origo_id	9.04
origo_label	Commercial
sector	BU
source	HolonIQ v2.1
gap_type	
latam_relevant	Y
cpi_aligned	TBD — Phase 1
eu_taxonomy_aligned	TBD — Phase 1
cbi_eligible	TBD — Phase 1
eudr_coffee	N
eudr_cacao	N
eudr_relevant	N
eudr_article9_field	none
eudr_evidence_type	none
col_gf_sector	construction
col_gf_activity	New sustainable building construction
col_gf_aligned	Y
col_ndc2030_aligned	TBD — Phase 2
latam_colombia	Y
cr_gf_aligned	Y
cth_data_coverage	TBD — Phase 4
schema_version	1.0
last_updated	2026-05-26

Description

[To be populated — description of what this taxonomy node covers and its relevance to LATAM climate innovation and EUDR compliance.]

EUDR Compliance Relevance

[To be populated during Phase 3 — how data in this category supports Article 9 due diligence.]

Colombia Context

[To be populated during Phase 4 — Colombia-specific regulatory alignment, CTH field presence, market conditions.]


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  "col_gf_aligned": "Y",
  "latam_colombia": "Y",
  "cr_gf_aligned": "Y",
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}
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9.05 — Transport Infrastructure

origo_id	9.05
origo_label	Transport Infrastructure
sector	BU
source	HolonIQ v2.1
gap_type	
latam_relevant	Y
cpi_aligned	TBD — Phase 1
eu_taxonomy_aligned	TBD — Phase 1
cbi_eligible	TBD — Phase 1
eudr_coffee	N
eudr_cacao	N
eudr_relevant	N
eudr_article9_field	none
eudr_evidence_type	none
col_gf_sector	transport
col_gf_activity	Transport infrastructure for modal shift
col_gf_aligned	Y
col_ndc2030_aligned	TBD — Phase 2
latam_colombia	Y
cr_gf_aligned	Y
cth_data_coverage	TBD — Phase 4
schema_version	1.0
last_updated	2026-05-26

Description

[To be populated — description of what this taxonomy node covers and its relevance to LATAM climate innovation and EUDR compliance.]

EUDR Compliance Relevance

[To be populated during Phase 3 — how data in this category supports Article 9 due diligence.]

Colombia Context

[To be populated during Phase 4 — Colombia-specific regulatory alignment, CTH field presence, market conditions.]


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{
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CT-BU-001 — Green Building Design & Certification

origo_id	CT-BU-001
origo_label	Green Building Design & Certification
sector	BU
source	origo
cpi_aligned	Y — Buildings sector
eu_taxonomy_aligned	Y
cbi_eligible	Y
iea_aligned	N
col_gf_sector	Construcción
col_gf_activity	Construcción de nuevos edificios sostenibles
col_gf_aligned	Y
col_ndc2030_aligned	Y
col_sisclima_relevant	Y
col_ley2169	Y
latam_colombia	Y
cth_clp_coverage	N
cth_data_coverage	N
schema_version	1.1
last_updated	2026-05-27

Description

Technologies, standards, and certification frameworks for designing buildings that minimize environmental impact across their lifecycle. Covers green building rating systems (EDGE, LEED, CASA Colombia), energy modeling, sustainable materials selection, and net-zero building design approaches.

Colombia Context

Colombia's Resolución 0549 (2015) established the country's first mandatory green construction code, setting minimum energy and water efficiency thresholds for new buildings. CAMACOL (Cámara Colombiana de la Construcción) actively promotes sustainable construction practices across the sector. The EDGE certification system, developed by IFC, has strong uptake in Colombia — particularly in Bogotá, Medellín, and Barranquilla — with over 100 certified projects. Colombia's NDC 2030 includes a buildings sector target requiring 20% reduction in energy consumption per square meter for new commercial buildings.

EUDR Relevance

Limited direct EUDR relevance. Wood used in construction could trigger EUDR due diligence requirements under the timber/wood commodity vertical if sourced from tropical forests. Green building certification schemes increasingly require verified sustainable sourcing for wood-based materials.

CTH Data Coverage

Not currently covered by CLP field programs or Sustenttia diagnostic platform. REIN Hub has not yet onboarded green building ventures. Potential future coverage through partnerships with CAMACOL member firms and EDGE-certified developers.

Green Finance Alignment

Strong alignment across all three green finance frameworks. Colombia's Taxonomía Verde (TVC) explicitly covers new sustainable building construction under the Construcción sector. CBI Low Carbon Buildings criteria apply to certified green buildings. EU Taxonomy Activity 7.1 (Construction of new buildings) requires near-zero energy building standards. Triple-aligned node suitable for green bond labeling.


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{
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  "source": "origo",
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  "eu_taxonomy_aligned": "Y",
  "cbi_eligible": "Y",
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  "col_gf_activity": "Construcción de nuevos edificios sostenibles",
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  "col_ndc2030_aligned": "Y",
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  "latam_colombia": "Y",
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}
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CT-BU-002 — Building Energy Retrofit

origo_id	CT-BU-002
origo_label	Building Energy Retrofit
sector	BU
source	origo
cpi_aligned	Y — Buildings sector
eu_taxonomy_aligned	Y
cbi_eligible	Y
iea_aligned	N
col_gf_sector	Construcción
col_gf_activity	Renovación de edificios para eficiencia energética
col_gf_aligned	Y
col_ndc2030_aligned	Y
col_sisclima_relevant	Y
col_ley2169	Y
latam_colombia	Y
cth_clp_coverage	N
cth_data_coverage	N
schema_version	1.1
last_updated	2026-05-27

Description

Technologies and strategies for improving energy performance of existing buildings. Includes envelope upgrades (insulation, glazing), HVAC system replacement, lighting retrofits, building energy management systems (BEMS), and deep energy retrofits targeting 50%+ energy reduction.

Colombia Context

Colombia's PROURE program (Programa de Uso Racional y Eficiente de Energía) provides the national framework for building energy efficiency, including incentives for retrofit projects. The urban building stock in major cities — Bogotá, Medellín, Cali, Barranquilla — presents significant retrofit potential, with most commercial buildings constructed before energy efficiency codes existed. Colombia's NDC 2030 buildings target implies substantial retrofit activity will be needed to meet sectoral emissions reductions. UPME (Unidad de Planeación Minero-Energética) publishes building energy benchmarks used to prioritize retrofit candidates.

EUDR Relevance

This node has no direct EUDR commodity relevance.

CTH Data Coverage

Not currently covered by CLP or Sustenttia. Building energy retrofit ventures are a potential fit for REIN Hub acceleration, particularly ESCOs (Energy Service Companies) operating in Colombian commercial real estate markets.

Green Finance Alignment

Strong green finance alignment. TVC explicitly includes building renovation for energy efficiency under the Construcción sector. CBI criteria cover building energy performance improvements with measurable energy savings. EU Taxonomy Activity 7.2 (Renovation of existing buildings) requires at least 30% primary energy demand reduction. Deep retrofits exceeding 60% savings qualify for enhanced green bond terms under CBI.


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{
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  "sector": "BU",
  "source": "origo",
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  "eu_taxonomy_aligned": "Y",
  "cbi_eligible": "Y",
  "iea_aligned": "N",
  "col_gf_sector": "Construcción",
  "col_gf_activity": "Renovación de edificios para eficiencia energética",
  "col_gf_aligned": "Y",
  "col_ndc2030_aligned": "Y",
  "col_sisclima_relevant": "Y",
  "col_ley2169": "Y",
  "latam_colombia": "Y",
  "cth_clp_coverage": "N",
  "cth_data_coverage": "N",
  "schema_version": "1.1",
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}
```

CT-BU-003 — Affordable Green Housing

origo_id	CT-BU-003
origo_label	Affordable Green Housing
sector	BU
source	origo
cpi_aligned	Y — Buildings sector
eu_taxonomy_aligned	partial
cbi_eligible	Y
iea_aligned	N
col_gf_sector	Construcción
col_gf_activity	Vivienda de interés social con criterios de sostenibilidad
col_gf_aligned	Y
col_ndc2030_aligned	Y
col_sisclima_relevant	Y
col_ley2169	Y
latam_colombia	Y
cth_clp_coverage	N
cth_data_coverage	N
schema_version	1.1
last_updated	2026-05-27

Description

Integration of green building principles into affordable and social housing programs. Covers passive design for tropical climates, low-cost energy efficiency measures, sustainable materials appropriate for social housing budgets, and nature-based solutions for thermal comfort in low-income housing.

Colombia Context

Colombia's VIS (Vivienda de Interés Social) and VIP (Vivienda de Interés Prioritario) programs deliver hundreds of thousands of social housing units annually through Minvivienda (Ministerio de Vivienda, Ciudad y Territorio). Resolución 0549 applies minimum sustainability standards to these programs, but compliance remains uneven. The TVC construction sector explicitly includes sustainable social housing as an eligible activity. Colombia's climate vulnerability — particularly heat stress in Caribbean coast cities like Barranquilla and Santa Marta — makes passive cooling design critical for affordable housing. Minvivienda's Mi Casa Ya program is the primary

subsidy vehicle, now incorporating sustainability criteria.

EUDR Relevance

This node has no direct EUDR commodity relevance.

CTH Data Coverage

Not directly covered by CLP field programs. Sustenttia has potential application for sustainability diagnostics of social housing developers. REIN Hub could support cleantech ventures targeting VIS/VIP material innovation or passive design solutions.

Green Finance Alignment

TVC fully covers sustainable social housing under the Construcción sector, making this node eligible for Colombian green bond issuance. CBI criteria apply through the low-carbon buildings pathway. EU Taxonomy alignment is partial — Activity 7.1 standards are technically applicable but NZEB (near-zero energy building) requirements may be difficult to meet at VIS/VIP budget levels. Social co-benefits strengthen the case for sustainability-linked bond instruments.


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  "origo_label": "Affordable Green Housing",
  "sector": "BU",
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  "cbi_eligible": "Y",
  "iea_aligned": "N",
  "col_gf_sector": "Construcción",
  "col_gf_activity": "Vivienda de interés social con criterios de sostenibilidad",
  "col_gf_aligned": "Y",
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  "col_ley2169": "Y",
  "latam_colombia": "Y",
  "cth_clp_coverage": "N",
  "cth_data_coverage": "N",
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CT-BU-004 — Urban Resilience & Climate Adaptation Infrastructure

origo_id	CT-BU-004
origo_label	Urban Resilience & Climate Adaptation Infrastructure
sector	BU
source	origo
cpi_aligned	Y — Buildings/Cross-sectoral
eu_taxonomy_aligned	Y
cbi_eligible	Y
iea_aligned	N
col_gf_sector	Construcción
col_gf_activity	Infraestructura urbana resiliente al cambio climático
col_gf_aligned	Y
col_ndc2030_aligned	Y
col_sisclima_relevant	Y
col_ley2169	Y
latam_colombia	Y
cth_clp_coverage	N
cth_data_coverage	N
schema_version	1.1
last_updated	2026-05-27

Description

Infrastructure designed to increase urban resilience to climate impacts including flooding, heat stress, sea-level rise, and extreme weather events. Covers permeable pavements, urban drainage systems, climate-resilient public infrastructure, cooling corridors, and integrated urban planning for adaptation.

Colombia Context

Colombian cities face escalating climate adaptation challenges. Cali and Barranquilla experience severe urban heat island effects, with surface temperatures in dense urban cores exceeding surrounding areas by 4-6°C.

Bogotá's stormwater infrastructure is overwhelmed during La Niña events, causing recurrent flooding in southern barrios. Colombia's NDC 2030 adaptation component prioritizes urban resilience, and SISCLIMA (Sistema Nacional de Cambio Climático) coordinates adaptation planning across municipalities. UNGRD (Unidad Nacional para la Gestión del Riesgo de Desastres) manages disaster risk reduction infrastructure. Ley 2169 (Acción Climática) mandates municipal climate adaptation plans.

EUDR Relevance

This node has no direct EUDR commodity relevance.

CTH Data Coverage

Not directly covered by CLP or Sustenttia. Urban resilience infrastructure represents a potential future vertical for CTH, particularly where nature-based solutions (bioswales, constructed wetlands) overlap with water management technologies.

Green Finance Alignment

TVC covers climate-resilient urban infrastructure under the Construcción sector. CBI Climate Resilience criteria apply to infrastructure designed for adaptation. EU Taxonomy Activity 7.7 (Acquisition and ownership of buildings — climate adaptation) and cross-cutting adaptation criteria under Objective 2 are relevant. Adaptation-focused green bonds and resilience bonds are an emerging instrument class for this node.


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  "origo_label": "Urban Resilience & Climate Adaptation Infrastructure",
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  "source": "origo",
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  "eu_taxonomy_aligned": "Y",
  "cbi_eligible": "Y",
  "iea_aligned": "N",
  "col_gf_sector": "Construcción",
  "col_gf_activity": "Infraestructura urbana resiliente al cambio climático",
  "col_gf_aligned": "Y",
  "col_ndc2030_aligned": "Y",
  "col_sisclima_relevant": "Y",
  "col_ley2169": "Y",
  "latam_colombia": "Y",
  "cth_clp_coverage": "N",
  "cth_data_coverage": "N",
  "schema_version": "1.1",
  "last_updated": "2026-05-27"
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CT-BU-005 — Green Roofs & Urban Greening

origo_id	CT-BU-005
origo_label	Green Roofs & Urban Greening
sector	BU
source	origo
cpi_aligned	partial — Buildings/cross-sectoral
eu_taxonomy_aligned	partial
cbi_eligible	N
iea_aligned	N
col_gf_sector	Construcción
col_gf_activity	Techos verdes y jardinería urbana sostenible
col_gf_aligned	partial
col_ndc2030_aligned	Y
col_sisclima_relevant	Y
col_ley2169	N
latam_colombia	Y
cth_clp_coverage	N
cth_data_coverage	N
schema_version	1.1
last_updated	2026-05-27

Description

Green roof systems, vertical gardens, urban tree canopy expansion, and other nature-based urban greening interventions. Delivers co-benefits including stormwater management, urban heat island mitigation, biodiversity habitat, air quality improvement, and building insulation.

Colombia Context

Bogotá's Resolución on rooftop gardens (jardines en cubiertas) establishes guidelines for green roof implementation in the capital. The city has promoted urban greening as part of its climate action plan, with targets for increasing urban tree canopy coverage. Colombia's COP16 legacy (Cali, 2024) emphasized urban biodiversity, creating political momentum for nature-based solutions in cities. Medellín's Corredor Verde initiative demonstrated measurable heat reduction along green corridors. Urban greening intersects with Colombia's biodiversity commitments under the Kunming-Montreal Global Biodiversity Framework adopted at COP15.

EUDR Relevance

This node has no direct EUDR commodity relevance.

CTH Data Coverage

Not covered by CLP or Sustenttia. Limited REIN Hub relevance. Urban greening ventures are primarily municipal-scale rather than startup-scale, though green roof technology providers could be candidates for future REIN Hub cohorts.

Green Finance Alignment

TVC partial alignment — green roofs are not explicitly listed but fall under sustainable construction practices. CBI does not have a specific green roofs criterion. EU Taxonomy partial alignment through biodiversity (Objective 6) and adaptation (Objective 2) pathways but no dedicated activity code. Municipal green bonds could fund urban greening at scale, particularly bundled with stormwater management infrastructure.


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  "origo_label": "Green Roofs & Urban Greening",
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  "col_gf_sector": "Construcción",
  "col_gf_activity": "Techos verdes y jardinería urbana sostenible",
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  "col_ndc2030_aligned": "Y",
  "col_sisclima_relevant": "Y",
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